

Lockheed Martin Environmental Services
US EPA Environmental Science Center
701 Mapes Road Ft. Meade, MD 20755-5350
Telephone 410-305-3037 Facsimile 410-305-3597



ORIGINAL

LOCKHEED MARTIN



Mr. Michael Towle, 3HS31
USEPA Region 3
1650 Arch Street
Philadelphia, PA 19103-2029

May 24, 2001

Dear Michael,

Enclosed you will find the unvalidated Form I's and associated documents for SDG C0001, RAS case 29238, 12th Street Landfill site. Please contact ESAT's PO, Fredrick Foreman, at 410-305-2629, if ESAT can be of any further assistance.

Sincerely,

A handwritten signature in cursive script, appearing to read "Lisa D. Penix".

Lisa D. Penix
ESAT RSCC

cc: Fred Foreman, ESAT PO

START/TEMI

U.S. EPA Region III Sample Scheduling Request Form

ORIGINAL

RAS CASE No: CT893		29238		DAS No:		NSF No:	
Date: April 30, 2001		Data Validation Level: IM, IM1				EPA Lab Reply:	
Site Name: 12th Street Landfill						Cost:	
Address: 12th Street at Brandywine River				City: Wilmington		State: DE	
Latitude:		Longitude: 38°10'		Anal +Val Data TAT: 28 days			
Program: Superfund		CERCLIS No: DESFN0305510		Activity: Removal			
Account No: 01T03N50102DD3300B00		Operable Unit:		Spill ID:			
Preparer: (b) (4)		RPM/PO: Michael Towle (3HS31)		Site Leader: (b) (4)			
Phone: (b) (4)		Phone: 215-814-3272		Phone: (b) (4)			
FAX: 610-485-8587		FAX: 215-814-3254		FAX: 610-485-8587			
E-mail: (b) (4) @ttemi.com		E-mail: towle.michael@epa.gov		E-mail: (b) (4) @ttemi.com			
EPA CO: Deborah Eble		Contract Type: START 3 Eastern Area		Prime: Tetra Tech EM Inc.		Sub:	
Lab Assignment Date:			Analytical TAT: 14 days		Ship Date From: 05/07/01		
Organic Lab:					Ship Date To: 05/11/01		
Inorganic Lab: LIBRTY					Carrier:		
SAMPLES	METHOD	PARAMETER				MATRIX	
5	CLP SOW ILM04.1	TAL METALS				SURFACE WATER	
5	CLP SOW OLM04.2	TCL SVOA				SURFACE WATER	

NOTE: Data validation levels M3 & IM2 require justification. QC field samples must be included as part of total number of samples.

1. Special Instructions: OSC needs results faxed to him at the above number when they are received at RSCC.
2. Objectives / Project Plan ID / Permit ID: Verify if further cleanup is necessary.
3. Program / Project / Permit Reporting Limits As per method.
4. DQO (QC Requirements) As per method.



USEPA Contract Laboratory Program Organic Traffic Report

Case No: 29238

DAS No:

SDG No:

C0001

L

Date Shipped: 5/8/2001

Carrier Name: FedEx

Airbill: 828655996774

Shipped to: Clayton Environmental
Consultants, Inc
22345 Roethel Drive
Novi MI 48375
(248) 344-1770

Date Received/Received by: (b) (4)

Lab Contract No: 68699069 Unit Price: \$59.00

Transfer To:

Date Received/Received By:

Lab Contract No: Price:

Sampler (S) (b) (4)

Relinquished By: Brian Croft

Relinquished By:

Relinquished By:

Date / Time:

5-8-01 1700

Date / Time:

5-9-01 9:57 AM

Date / Time:

Received By:

FEDEX

Received By:

(b) (4)

Received By:

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE	STATION LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
C0001 ✓	Surface Water/ (b) (4)	M/G	BNA (14)	2 (Ice Only), 3 (Ice Only) (2)	SW-1 (downstream bank sample)	5/8/2001 14:10	MC0001	need 5/24/01 JDP C0001
C0002 ✓	Surface Water/ (b) (4)	M/G	BNA (14)	5 (Ice Only), 6 (Ice Only) (2)	SW-2 (midstream bank sample)	5/8/2001 14:20	MC0002	
C0003 ✓	Surface Water/ (b) (4)	M/G	BNA (14)	8 (Ice Only), 9 (Ice Only) (2)	SW-3 (upstream bank sample)	5/8/2001 14:35	MC0003	
C0004	(b) (4)	M/G	BNA (14)	13 (Ice Only), 14 (Ice Only), 15 (Ice Only), 16 (Ice Only), 17 (Ice Only), 18 (Ice Only) (6)	SW-4 (middle of Brandywine Creek)	5/8/2001 14:45	MC0004	
*C0005 ✓	Surface Water/ Brian Croft	M/G	BNA (14)	20 (Ice Only), 21 (Ice Only) (2)	SW-5 (field blank)	5/8/2001 13:30	MC0005	

*C0005 ✓
first sample
in SDG

Shipment for Case Complete? Y	Sample(s) to be used for laboratory QC: C0004	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt: 17.7	Chain of Custody Seal Number:
Analysis Key: BNA = CLP TCL Semivolatiles-water	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact? <input checked="" type="checkbox"/>	Shipment Iced? <input checked="" type="checkbox"/>

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

Send Copy to: Contract Laboratory Analytical Services Support, 2000 Edmund Halley Dr., Reston, VA. 20191-3436 Phone 703/264-9348 Fax 703/264-9222

TR Number: 3-555513690-050801-0001

ORIGINAL

SDG NARRATIVE

Lab Name: Clayton Laboratory Services (CLAYTN)

Contract No.: 68-W-99-069

Case No.: 29238

SDG No.: C0001

Clayton Work Order No.: 01050333

DO#: 2

Turnaround Requirements: 14 Days

	EPA Sample Number	Matrix	Analysis
1	C0001	Aqueous	BNA
2	C0002	Aqueous	BNA
3	C0003	Aqueous	BNA
4	C0004*	Aqueous	BNA
5	C0005	Aqueous	BNA

*MS/MSD

Sample Information

Sample *C0004* was designated as the MS/MSD for the water samples.

Shipment Information

Five water samples for BNA analysis were received on May 9, 2001, under Federal Express airbill no. 8286-5599-6774. All samples were received intact. The temperature of the cooler was 17.7°C.

Date Recv'd:	Cooler #:	Airbill #:	Sample ID:	Temperature (C):*
5/9/01	1	8286-5599-6774	C0001, C0002, C0003, C0004, C0005	17.7

*No temperature blank was provided. Temperatures were taken using an IR gun to comply with SOW requirements.

Note: The Region was contacted regarding the sample temperature receipt. The Region instructed the laboratory to proceed with the analysis.

Analytical Information**BNA**

Among the target compounds in BNA analysis Indeno[1,2,3-cd]pyrene and Dibenzo[a,h]anthracene co-eluted. Both compounds share ions 278 and 139. Fortunately, there is no ion 276 in Dibenzo[a,h]anthracene, and there is only 6% of ion 278 (relative to ion 276); and only 3% of ion 139 (relative to ion 138) present in Indeno[1,2,3-cd]pyrene. When ion 276 is used as a quant ion for Indeno[1,2,3-cd]pyrene, there should not be any interference problem. However, there will be a 6% overlap of ion 278 which will cause less accuracy for Dibenzo[a,h]anthracene. To guard against this deficiency, we include the secondary ion of 279 and 139 for the compound Dibenzo[a,h]anthracene in the method used as a further qualitative tool because there is no ion 279 present in the Indeno[1,2,3-cd]pyrene.

GC Columns

Instrument ID	Column Serial #	Brand Name	Internal Diameter (mm)	Length (Meters)	Coating Material	Film Thickness (μ m)
BNA MS-HP5E	217778	Restek	0.25	30	XTI-5	1

Lab Name: Clayton Laboratory Services (CLAYTN)

Contract No.: 68-W-99-069

Case No.: 29238

SDG No.: C0001

Clayton Work Order No.: 01050333

ORIGINAL

Tentatively Identified Alkanes of Semivolatile Analysis

EPA Sample No.	n-Alkane (ug/Kg or ug/L)	Branched Alkane (ug/Kg or ug/L)	Cyclic Alkane (ug/Kg or ug/L)
C0001	0	0	0
C0002	0	0	0
C0003	0	3	0
C0004	0	0	0
C0005	0	0	0
SBLKW1	0	0	0

Lab Name: Clayton Laboratory Services (CLAYTN)

Contract No.: 68-W-99-069

Case No.: 29238

SDG No.: C0001

Clayton Work Order No.: 01050333

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Technical/Administrative Problems and Corrective Actions

For the VOA and BNA analysis, the Hewlett-Packard software flags all manual edits or any compounds affected by the manual edit of an internal standard with an "m" on the reports. The peak is displayed with the baseline of the manual edits and is documented along with the associated "m" flag on the quant report and spectra report. These edits were necessary due to poor computer integration.

For the pesticide/PCB analysis, all manual edits are documented in the Timed Event Table and are flagged with a capital "M." The time with a "M" indicates the start time and a -M indicates the stop time of the integration. The baseline is then drawn and displayed on the corresponding chromatogram. These manual integrations were necessary due to poor computer integration.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the laboratory manager or his/her designee, as verified by the following signature.

(b) (4)

Date

5/23/01

(b) (4)

Program Manager

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

C0001

ORIGINAL

Lab Name: Clayton Group ServicesContract: 68-W-99-069Lab Code: CLAYTNCase No.: 29238

SAS No.: _____

SDG No.: C0001Matrix: (soil/water) WATERLab Sample ID: 01050333-001ASample wt/vol: 1000 (g/mL) MLLab File ID: E1232.DLevel: (low/med) LOWDate Received: 05/09/01% Moisture: Decanted: (Y/N) NDate Extracted: 05/10/01Concentrated Extract Volume: 1000 (µL)Date Analyzed: 05/12/01Injection Volume: 2 (µL)Dilution Factor: 1.00GPC Cleanup: (Y/N) N pH: _____Extraction: (Type CONT)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) UG/L	Q
100-52-7	Benzaldehyde	10	U
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
98-86-2	Acetophenone	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
105-60-2	Caprolactam	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
92-52-4	1,1'-Biphenyl	10	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
606-20-2	2,6-Dinitrotoluene	10	U
208-96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

C0001

ORIGINAL

Lab Name: Clayton Group ServicesContract: 68-W-99-069Lab Code: CLAYTNCase No.: 29238

SAS No.: _____

SDG No.: C0001Matrix: (soil/water) WATERLab Sample ID: 01050333-001ASample wt/vol: 1000 (g/mL) MLLab File ID: E1232.DLevel: (low/med) LOWDate Received: 05/09/01% Moisture: Decanted: (Y/N) NDate Extracted: 05/10/01Concentrated Extract Volume: 1000 (µL)Date Analyzed: 05/12/01Injection Volume: 2 (µL)Dilution Factor: 1.00GPC Cleanup: (Y/N) N pH: _____Extraction: (Type CONT

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	<u>Q</u>
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
86-73-7	Fluorene	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
1912-24-9	Atrazine	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	1	J
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) Cannot be separated from Diphenylamine

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDSEPA SAMPLE NO. ORIGINAL

C0001

Lab Name: Clayton Group Services Contract: 68-W-99-069
Lab Code: CLAYTN Case No.: 29238 SAS No.: _____ SDG No.: C0001
Matrix: (soil/water) WATER Lab Sample ID: 01050333-001A
Sample wt/vol: 1000 (g/mL) ML Lab File ID: E1232.D
Level: (low/med) LOW Date Received: 05/09/01
% Moisture: _____ Decanted: (Y/N) N Date Extracted: 05/10/01
Concentrated Extract Volume: 1000 (μ l) Date Analyzed: 05/12/01
Injection Volume: 2 (μ l) Dilution Factor: 1.00
GPC Cleanup: (Y/N) N pH: _____ Extraction: (Type) CONT

CONCENTRATION UNITS:

Number TICs found: 0 (μ g/L or μ g/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

C0002

ORIGINAL

Lab Name: Clayton Group ServicesContract: 68-W-99-069Lab Code: CLAYTNCase No.: 29238

SAS No.: _____

SDG No.: C0001Matrix: (soil/water) WATERLab Sample ID: 01050333-002ASample wt/vol: 1000 (g/mL) MLLab File ID: E1233.DLevel: (low/med) LOWDate Received: 05/09/01% Moisture: Decanted: (Y/N) NDate Extracted: 05/10/01Concentrated Extract Volume: 1000 (µL)Date Analyzed: 05/12/01Injection Volume: 2 (µL)Dilution Factor: 1.00GPC Cleanup: (Y/N) N pH: _____Extraction: (Type CONT)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	Q
100-52-7	Benzaldehyde	10	U
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
98-86-2	Acetophenone	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
105-60-2	Caprolactam	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
92-52-4	1,1'-Biphenyl	10	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
606-20-2	2,6-Dinitrotoluene	10	U
208-96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1D
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C0002

ORIGINAL

Lab Name: Clayton Group Services

Contract: 68-W-99-069

Lab Code: CLAYTN

Case No.: 29238

SAS No.: _____

SDG No.: C0001

Matrix: (soil/water) WATER

Lab Sample ID: 01050333-002A

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: E1233.D

Level: (low/med) LOW

Date Received: 05/09/01

% Moisture: Decanted: (Y/N) N

Date Extracted: 05/10/01

Concentrated Extract Volume: 1000 (µL)

Date Analyzed: 05/12/01

Injection Volume: 2 (µL)

Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: _____

Extraction: (Type CONT

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	0.6	J
86-73-7	Fluorene	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
1912-24-9	Atrazine	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) Cannot be separated from Diphenylamine

1G
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C0002

ORIGINAL

Lab Name: Clayton Group Services Contract: 68-W-99-069
Lab Code: CLAYTN Case No.: 29238 SAS No.: _____ SDG No.: C0001
Matrix: (soil/water) WATER Lab Sample ID: 01050333-002A
Sample wt/vol: 1000 (g/mL) ML Lab File ID: E1233.D
Level: (low/med) LOW Date Received: 05/09/01
% Moisture: _____ Decanted: (Y/N) N Date Extracted: 05/10/01
Concentrated Extract Volume: 1000 (μ l) Date Analyzed: 05/12/01
Injection Volume: 2 (μ l) Dilution Factor: 1.00
GPC Cleanup: (Y/N) N pH: _____ Extraction: (Type) CONT

CONCENTRATION UNITS:

Number TICs found: 0 (μ g/L or μ g/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

C0003

ORIGINAL

Lab Name: Clayton Group ServicesContract: 68-W-99-069Lab Code: CLAYTNCase No.: 29238

SAS No.: _____

SDG No.: C0001Matrix: (soil/water) WATERLab Sample ID: 01050333-003ASample wt/vol: 1000 (g/mL) MLLab File ID: E1234.DLevel: (low/med) LOWDate Received: 05/09/01% Moisture: Decanted: (Y/N) NDate Extracted: 05/10/01Concentrated Extract Volume: 1000 (µL)Date Analyzed: 05/12/01Injection Volume: 2 (µL)Dilution Factor: 1.00GPC Cleanup: (Y/N) N pH: _____Extraction: (Type CONT)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) UG/L	Q
100-52-7	Benzaldehyde	10	U
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
98-86-2	Acetophenone	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
105-60-2	Caprolactam	0.5	J
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
92-52-4	1,1'-Biphenyl	10	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
606-20-2	2,6-Dinitrotoluene	10	U
208-96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

C0003

ORIGINAL

Lab Name: Clayton Group ServicesContract: 68-W-99-069Lab Code: CLAYTNCase No.: 29238

SAS No.: _____

SDG No.: C0001Matrix: (soil/water) WATERLab Sample ID: 01050333-003ASample wt/vol: 1000 (g/mL) MLLab File ID: E1234.DLevel: (low/med) LOWDate Received: 05/09/01% Moisture: Decanted: (Y/N) NDate Extracted: 05/10/01Concentrated Extract Volume: 1000 (µL)Date Analyzed: 05/12/01Injection Volume: 2 (µL)Dilution Factor: 1.00GPC Cleanup: (Y/N) N pH: _____Extraction: (Type CONT

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
86-73-7	Fluorene	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
1912-24-9	Atrazine	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	6	J
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) Cannot be separated from Diphenylamine

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C0003

ORIGINAL

Lab Name: Clayton Group Services Contract: 68-W-99-069

Lab Code: CLAYTN Case No.: 29238 SAS No.: _____ SDG No.: C0001

Matrix: (soil/water) WATER Lab Sample ID: 01050333-003A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E1234.D

Level: (low/med) LOW Date Received: 05/09/01

% Moisture: _____ Decanted: (Y/N) N Date Extracted: 05/10/01

Concentrated Extract Volume: 1000 (μ l) Date Analyzed: 05/12/01

Injection Volume: 2 (μ l) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: _____ Extraction: (Type) CONT

CONCENTRATION UNITS:

Number TICs found: 7 (μ g/L or μ g/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	Unknown alcohol (6.7)	6.70	8	J
2.	Unknown alcohol (6.88)	6.88	6	J
3.	Unknown hydrocarbon	11.90	2	J
4.	Unknown (14.4)	14.40	2	J
5.	Unknown (20.13)	20.13	8	J
6.	Unknown (21.43)	21.43	2	J
7.	Unknown (21.65)	21.65	3	J

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

C0004

ORIGINAL

Lab Name: Clayton Group ServicesContract: 68-W-99-069Lab Code: CLAYTNCase No.: 29238

SAS No.: _____

SDG No.: C0001Matrix: (soil/water) WATERLab Sample ID: 01050333-004ASample wt/vol: 1000 (g/mL) MLLab File ID: E1235.DLevel: (low/med) LOWDate Received: 05/09/01% Moisture: Decanted: (Y/N) NDate Extracted: 05/10/01Concentrated Extract Volume: 1000 (µL)Date Analyzed: 05/12/01Injection Volume: 2 (µL)Dilution Factor: 1.00GPC Cleanup: (Y/N) N pH: _____Extraction: (Type CONT

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) UG/L	Q
100-52-7	Benzaldehyde	10	U
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
98-86-2	Acetophenone	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
105-60-2	Caprolactam	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
92-52-4	1,1'-Biphenyl	10	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
606-20-2	2,6-Dinitrotoluene	10	U
208-96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1D
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C0004

ORIGINAL

Lab Name: Clayton Group Services

Contract: 68-W-99-069

Lab Code: CLAYTN

Case No.: 29238

SAS No.: _____

SDG No.: C0001

Matrix: (soil/water) WATER

Lab Sample ID: 01050333-004A

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: E1235.D

Level: (low/med) LOW

Date Received: 05/09/01

% Moisture: Decanted: (Y/N) N

Date Extracted: 05/10/01

Concentrated Extract Volume: 1000 (μL)

Date Analyzed: 05/12/01

Injection Volume: 2 (μL)

Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: _____

Extraction: (Type CONT

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(μg/L or μg/Kg) <u>UG/L</u>	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
86-73-7	Fluorene	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
1912-24-9	Atrazine	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) Cannot be separated from Diphenylamine

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C0004

Lab Name: Clayton Group ServicesContract: 68-W-99-069Lab Code: CLAYTNCase No.: 29238

SAS No.: _____

SDG No.: C0001Matrix: (soil/water) WATERLab Sample ID: 01050333-004ASample wt/vol: 1000 (g/mL) MLLab File ID: E1235.DLevel: (low/med) LOWDate Received: 05/09/01% Moisture: _____ Decanted: (Y/N) NDate Extracted: 05/10/01Concentrated Extract Volume: 1000 (μ l)Date Analyzed: 05/12/01Injection Volume: 2 (μ l)Dilution Factor: 1.00GPC Cleanup: (Y/N) N pH: _____Extraction: (Type) CONT

CONCENTRATION UNITS:

Number TICs found: 0 (μ g/L or μ g/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

C0005

ORIGINAL

Lab Name: Clayton Group ServicesContract: 68-W-99-069Lab Code: CLAYTNCase No.: 29238

SAS No.: _____

SDG No.: C0001Matrix: (soil/water) WATERLab Sample ID: 01050333-005ASample wt/vol: 1000 (g/mL) MLLab File ID: E1236.DLevel: (low/med) LOWDate Received: 05/09/01% Moisture: Decanted: (Y/N) NDate Extracted: 05/10/01Concentrated Extract Volume: 1000 (μL)Date Analyzed: 05/12/01Injection Volume: 2 (μL)Dilution Factor: 1.00GPC Cleanup: (Y/N) N pH: _____Extraction: (Type CONT

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(μg/L or μg/Kg) <u>UG/L</u>	Q
100-52-7	Benzaldehyde	10	U
108-95-2	Phenol	2	J
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
98-86-2	Acetophenone	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
105-60-2	Caprolactam	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
92-52-4	1,1'-Biphenyl	10	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
606-20-2	2,6-Dinitrotoluene	10	U
208-96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1D
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C0005

ORIGINAL

Lab Name: Clayton Group Services

Contract: 68-W-99-069

Lab Code: CLAYTN

Case No.: 29238

SAS No.: _____

SDG No.: C0001

Matrix: (soil/water) WATER

Lab Sample ID: 01050333-005A

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: E1236.D

Level: (low/med) LOW

Date Received: 05/09/01

% Moisture: Decanted: (Y/N) N

Date Extracted: 05/10/01

Concentrated Extract Volume: 1000 (μL)

Date Analyzed: 05/12/01

Injection Volume: 2 (μL)

Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: _____

Extraction: (Type CONT

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(μg/L or μg/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
86-73-7	Fluorene	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
1912-24-9	Atrazine	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	0.6	J
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) Cannot be separated from Diphenylamine

1G
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C0005

ORIGINAL

Lab Name: Clayton Group Services Contract: 68-W-99-069
Lab Code: CLAYTN Case No.: 29238 SAS No.: _____ SDG No.: C0001
Matrix: (soil/water) WATER Lab Sample ID: 01050333-005A
Sample wt/vol: 1000 (g/mL) ML Lab File ID: E1236.D
Level: (low/med) LOW Date Received: 05/09/01
% Moisture: _____ Decanted: (Y/N) N Date Extracted: 05/10/01
Concentrated Extract Volume: 1000 (μ l) Date Analyzed: 05/12/01
Injection Volume: 2 (μ l) Dilution Factor: 1.00
GPC Cleanup: (Y/N) N pH: _____ Extraction: (Type) CONT

CONCENTRATION UNITS:

Number TICs found: 2 (μ g/L or μ g/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1. 000096-76-4	Phenol, 2,4-bis(1,1-dimethylethyl)-	13.49	62	NJ
2.	Unknown	16.99	10	J

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SBLKW1

ORIGINAL

Lab Name: Clayton Group ServicesContract: 68-W-99-069Lab Code: CLAYTNCase No.: 29238

SAS No.: _____

SDG No.: C0001Matrix: (soil/water) WATERLab Sample ID: 01050333-006ASample wt/vol: 1000 (g/mL) MLLab File ID: E1230.DLevel: (low/med) LOWDate Received: 05/09/01% Moisture: Decanted: (Y/N) NDate Extracted: 05/10/01Concentrated Extract Volume: 1000 (µL)Date Analyzed: 05/12/01Injection Volume: 2 (µL)Dilution Factor: 1.00GPC Cleanup: (Y/N) N pH: _____Extraction: (Type CONT

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	<u>Q</u>
100-52-7	Benzaldehyde	10	U
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
98-86-2	Acetophenone	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
105-60-2	Caprolactam	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
92-52-4	1,1'-Biphenyl	10	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
606-20-2	2,6-Dinitrotoluene	10	U
208-96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SBLKW1

ORIGINAL

Lab Name: Clayton Group ServicesContract: 68-W-99-069Lab Code: CLAYTNCase No.: 29238

SAS No.: _____

SDG No.: C0001Matrix: (soil/water) WATERLab Sample ID: 01050333-006ASample wt/vol: 1000 (g/mL) MLLab File ID: E1230.DLevel: (low/med) LOWDate Received: 05/09/01% Moisture: Decanted: (Y/N) NDate Extracted: 05/10/01Concentrated Extract Volume: 1000 (µL)Date Analyzed: 05/12/01Injection Volume: 2 (µL)Dilution Factor: 1.00GPC Cleanup: (Y/N) N

pH: _____

Extraction: (Type CONT)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
86-73-7	Fluorene	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
1912-24-9	Atrazine	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) Cannot be separated from Diphenylamine

1G
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO. ORIGINAL

SBLKW1

Lab Name: Clayton Group Services Contract: 68-W-99-069
Lab Code: CLAYTN Case No.: 29238 SAS No.: _____ SDG No.: C0001
Matrix: (soil/water) WATER Lab Sample ID: 01050333-006A
Sample wt/vol: 1000 (g/mL) ML Lab File ID: E1230.D
Level: (low/med) LOW Date Received: 05/09/01
% Moisture: _____ Decanted: (Y/N) N Date Extracted: 05/10/01
Concentrated Extract Volume: 1000 (μ l) Date Analyzed: 05/12/01
Injection Volume: 2 (μ l) Dilution Factor: 1.00
GPC Cleanup: (Y/N) N pH: _____ Extraction: (Type) CONT

CONCENTRATION UNITS:

Number TICs found: 0 (μ g/L or μ g/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

C0004MS

ORIGINAL

Lab Name: Clayton Group ServicesContract: 68-W-99-069Lab Code: CLAYTNCase No.: 29238

SAS No.: _____

SDG No.: C0001Matrix: (soil/water) WATERLab Sample ID: 01050333-004BSample wt/vol: 1000 (g/mL) MLLab File ID: E1239.DLevel: (low/med) LOWDate Received: 05/09/01% Moisture: Decanted: (Y/N) NDate Extracted: 05/10/01Concentrated Extract Volume: 1000 (μL)Date Analyzed: 05/12/01Injection Volume: 2 (μL)Dilution Factor: 1.00GPC Cleanup: (Y/N) N pH: _____Extraction: (Type CONT

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(μg/L or μg/Kg) UG/L	Q
100-52-7	Benzaldehyde	10	U
108-95-2	Phenol	53	
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	54	
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
98-86-2	Acetophenone	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	36	
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
105-60-2	Caprolactam	10	U
59-50-7	4-Chloro-3-methylphenol	60	
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
92-52-4	1,1'-Biphenyl	10	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
606-20-2	2,6-Dinitrotoluene	10	U
208-96-8	Acenaphthylene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	37	

1D
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C0004MS

ORIGINAL

Lab Name: Clayton Group Services

Contract: 68-W-99-069

Lab Code: CLAYTN

Case No.: 29238

SAS No.: _____

SDG No.: C0001

Matrix: (soil/water) WATER

Lab Sample ID: 01050333-004B

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: E1239.D

Level: (low/med) LOW

Date Received: 05/09/01

% Moisture: Decanted: (Y/N) N

Date Extracted: 05/10/01

Concentrated Extract Volume: 1000 (µL)

Date Analyzed: 05/12/01

Injection Volume: 2 (µL)

Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: _____

Extraction: (Type CONT

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	65	
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	41	
84-66-2	Diethylphthalate	10	U
86-73-7	Fluorene	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
1912-24-9	Atrazine	10	U
87-86-5	Pentachlorophenol	72	
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	39	
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	0.8	J
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) Cannot be separated from Diphenylamine

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

C0004MSD

ORIGINAL

Lab Name: Clayton Group ServicesContract: 68-W-99-069Lab Code: CLAYTNCase No.: 29238

SAS No.: _____

SDG No.: C0001Matrix: (soil/water) WATERLab Sample ID: 01050333-004CSample wt/vol: 1000 (g/mL) MLLab File ID: E1240.DLevel: (low/med) LOWDate Received: 05/09/01% Moisture: Decanted: (Y/N) NDate Extracted: 05/10/01Concentrated Extract Volume: 1000 (µL)Date Analyzed: 05/12/01Injection Volume: 2 (µL)Dilution Factor: 1.00GPC Cleanup: (Y/N) N pH: _____Extraction: (Type CONT

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	Q
100-52-7	Benzaldehyde	10	U
108-95-2	Phenol	54	
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	54	
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
98-86-2	Acetophenone	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	41	
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
105-60-2	Caprolactam	10	U
59-50-7	4-Chloro-3-methylphenol	58	
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
92-52-4	1,1'-Biphenyl	10	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
606-20-2	2,6-Dinitrotoluene	10	U
208-96-8	Acenaphthylene	2	J
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	32	

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

C0004MSD

ORIGINAL

Lab Name: Clayton Group ServicesContract: 68-W-99-069Lab Code: CLAYTNCase No.: 29238

SAS No.: _____

SDG No.: C0001Matrix: (soil/water) WATERLab Sample ID: 01050333-004CSample wt/vol: 1000 (g/mL) MLLab File ID: E1240.DLevel: (low/med) LOWDate Received: 05/09/01% Moisture: Decanted: (Y/N) NDate Extracted: 05/10/01Concentrated Extract Volume: 1000 (µL)Date Analyzed: 05/12/01Injection Volume: 2 (µL)Dilution Factor: 1.00GPC Cleanup: (Y/N) N pH: _____Extraction: (Type CONT

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	70	
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	43	
84-66-2	Diethylphthalate	10	U
86-73-7	Fluorene	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
1912-24-9	Atrazine	10	U
87-86-5	Pentachlorophenol	78	
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	37	
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) Cannot be separated from Diphenylamine



USEPA Contract Laboratory Program Organic Traffic Report

Case No: 29238

DAS No:

SDG No:

C0001

L

Date Shipped: 5/8/2001 Carrier Name: FedEx Airbill: 828655996774 Shipped to: Clayton Environmental Consultants, Inc 22345 Roethel Drive Novi MI 48375 (248) 344-1770	Date Received/Received by: (b) (4)	Sampler (b) (4)	
	Lab Contract No: 68099069 Unit Price: \$59.00	Relinquished By: (b) (4)	Date / Time: 5-8-01 1700
	Transfer To: _____	Relinquished By: _____	Date / Time: 5-9-01 9:53 AM
	Date Received/Received By: _____	Relinquished By: _____	Date / Time: _____
Lab Contract No: _____ Price: _____	Received By: /		

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE	STATION LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
C0001	Surface Water/ (b) (4)	M/G	BNA (14)	2 (Ice Only), 3 (Ice Only) (2)	SW-1 (downstream bank sample)	5/8/2001 14:10	MC0001	
C0002	Surface Water/ (b) (4)	M/G	BNA (14)	5 (Ice Only), 6 (Ice Only) (2)	SW-2 (midstream bank sample)	5/8/2001 14:20	MC0002	
C0003	Surface Water/ (b) (4)	M/G	BNA (14)	8 (Ice Only), 9 (Ice Only) (2)	SW-3 (upstream bank sample)	5/8/2001 14:35	MC0003	
C0004	Surface Water/ (b) (4)	M/G	BNA (14)	13 (Ice Only), 14 (Ice Only), 15 (Ice Only), 16 (Ice Only), 17 (Ice Only), 18 (Ice Only) (6)	SW-4 (middle of Brandywine Creek)	5/8/2001 14:45	MC0004	
*C0005	Surface Water/ (b) (4)	M/G	BNA (14)	20 (Ice Only), 21 (Ice Only) (2)	SW-5 (field blank)	5/8/2001 13:30	MC0005	

*C0005
first sample
in SDG

Shipment for Case Complete? Y	Sample(s) to be used for laboratory QC: C0004	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt: 17.7	Chain of Custody Seal Number:
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact? <input checked="" type="checkbox"/>	Shipment Iced? <input checked="" type="checkbox"/>
BNA = CLP TCL Semivolatiles-water				

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

Send Copy to: Contract Laboratory Analytical Services Support, 2000 Edmund Halley Dr., Reston, VA. 20191-3436 Phone 703/264-9348 Fax 703/264-9222

TR Number: 3-555513690-050801-0001

CLAYTON LABORATORY SERVICES

CASE 29238 ORIGINAL
SDG# C0001

CLP COMMUNICATION LOG

Name: (b) (4)	Message	<input checked="" type="checkbox"/> Phone	<input type="checkbox"/> FAX
	<input type="checkbox"/> Recv'd <input checked="" type="checkbox"/> Sent Via	<input type="checkbox"/> V-mail	<input type="checkbox"/> Memo
		<input type="checkbox"/> Other	
Date/Time of Contact 5/9/01	Initiated by	<input checked="" type="checkbox"/> Lab	<input type="checkbox"/> Region
		<input type="checkbox"/> CLASS	<input type="checkbox"/> Other
Contact Name/Organization/Phone #:	12:25 - (b) (4) Dyn Corp; 1:29 John Quadra USEPA		

Case No. 29238	SDG No.	Region
Affected Samples: All		

Discussion/Issue:

Samples were received with no temperature blank. An IR gun was used - temp. was 17.7°C. I notified H. Bauer. She in turn notified the region.

John D. from EPA called me and asked when samples were (5/8:30) taken & when received (5/9 10:00). I also told him it was a very large cooler filled w/ vermiculite and only a small bag of ice. He was going to contact the next higher up person at EPA.

Resolution:

Resolution Completed

☐ Yes

Date/Time

☐ No

Referred to:

Date/Time

☐ N/A (not applicable)

6A6E 29238

SDG# C0001

ORIGINAL

From: (b) (4) <(b) (4)@dyncorp.com>
To: (b) (4) <(b) (4)@claytongrp.com>, ...
Date: Thu, May 10, 2001 12:02 PM
Subject: Region 03 | Case 29238 | Lab CLAYTN | Issue Missing temperature blank | FINAL

(b) (4)

Following is the resolution from Region 3. Per the Region, the lab should proceed with the analysis of the samples and note all of the problems in the case narrative. Please let me know if you have any other questions or problems.

Thanks,

(b) (4) r

(b) (4)

DynCorp
(703)264-9348

-----Original Message-----

From: Kwedar.John@epamail.epa.gov [mailto:Kwedar.John@epamail.epa.gov]
Sent: Thursday, May 10, 2001 11:31 AM
To: (b) (4)
Subject: RE: Region 03 | Case 29238 | Lab CLAYTN | Issue Missing temperature blank

As a follow-up FYI. Do you need more info?

John

----- Forwarded by John Kwedar/ESC/R3/USEPA/US on 05/10/01 11:30 AM -----

(b) (4)

<(b) (4)@ttemi.com>

To: John Kwedar/ESC/R3/USEPA/US@EPA
Subject: RE: Region 03 | Case 29238 | Lab CLAYTN | Issue Missing temperature blank
05/10/01 11:17 AM

John,

I spoke to the site leader Brian Croft and he wants the analysis to proceed. He said they put two 10 pound bags of ice in the cooler and does not understand why the samples were received at 17.5 oC. Please note the problems in the case narrative and qualify the data as necessary.

(b) (4)

Tetra Tech EM, Inc.

-----Original Message-----

From: Kwedar.John@epamail.epa.gov [mailto:Kwedar.John@epamail.epa.gov]
Sent: Thursday, May 10, 2001 7:47 AM
To: (b) (4) <(b) (4)@ttemi.com>
Subject: Region 03 | Case 29238 | Lab CLAYTN | Issue Missing temperature blank

----- Forwarded by John Kwedar/ESC/R3/USEPA/US on 05/10/01 07:46 AM -----

John Kwedar

To: (b) (4) <(b) (4)@ttemi.com>, towle.michael@epa.gov
cc: R3 ESC-CLIENTS

CASE 29238 ORIGINAL
SDG# C0001

05/09/01 01:45 PM

Subject: Region 03 | Case 29238 | Lab CLAYTN | Issue Missing temperature blank

Please see attached. Results will be compromised and flagged. Do we proceed or resample?

Thanks,

John Kwedar

----- Forwarded by John Kwedar/ESC/R3/USEPA/US on 05/09/01 01:31 PM -----

"(b) (4)"@dyncorp.com>

To: John Kwedar/ESC/R3/USEPA/US@EPA, Betty Jeffery/ESC/R3/USEPA/US@EPA
05/09/01 01:10 PM

Subject: Region 03 | Case 29238 | Lab CLAYTN | Issue Missing temperature blank

Please respond to "(b) (4)"

I received a voice-mail from CLAYTN to report that there was no temperature blank in the cooler for Case 29238. The lab used the IR gun to obtain a temperature of 17.7 C. The lab also reported that the samples arrived in a very large cooler (about 3 ft. long) and there were only two small bags of ice and a lot of vermiculite. The samples were not directly touching the ice in the cooler. Please advise on how the lab should proceed.

Thanks,

"(b) (4)"

"(b) (4)"

DynCorp
(703)264-9348

5/9 12:12 PM

Karen Coonan left a voice-mail to report that there was no temperature blank in the cooler for Case 29238. The lab used the IR gun to obtain a temperature of 17.7 C. The lab also reported that the samples arrived in a very large cooler (about 3 ft. long) and there were only two small bags of ice and a lot of vermiculite. The samples were not directly touching the ice in the cooler.

CC: "Dan Slizys (E-mail)" <slizys.dan@epamail.epa.gov>...

CASE 29238 ORIGINAL
SDG# C0001

From: (b) (4) dyncorp.com>
To: (b) (4) claytongrp.com>, ...
Date: Thu, May 10, 2001 12:02 PM
Subject: Region 03 | Case 29238 | Lab CLAYTN | Issue Missing temperature blank | FINAL

Karen,

Following is the resolution from Region 3. Per the Region, the lab should proceed with the analysis of the samples and note all of the problems in the case narrative. Please let me know if you have any other questions or problems.

Thanks,

(b) (4)

(b) (4)

DynCorp
(703)264-9348

-----Original Message-----

From: Kwedar.John@epamail.epa.gov [mailto:Kwedar.John@epamail.epa.gov]
Sent: Thursday, May 10, 2001 11:31 AM
To: (b) (4)
Subject: RE: Region 03 | Case 29238 | Lab CLAYTN | Issue Missing temperature blank

As a follow-up FYI. Do you need more info?

John

----- Forwarded by John Kwedar/ESC/R3/USEPA/US on 05/10/01 11:30 AM -----

(b) (4) ttemi.com>
To: John Kwedar/ESC/R3/USEPA/US@EPA
Subject: RE: Region 03 | Case 29238 | Lab CLAYTN | Issue Missing temperature blank
05/10/01 11:17 AM

John,

I spoke to the site leader Brian Croft and he wants the analysis to proceed. He said they put two 10 pound bags of ice in the cooler and does not understand why the samples were received at 17.5 oC. Please note the problems in the case narrative and qualify the data as necessary.

(b) (4)

Tetra Tech EM Inc.

-----Original Message-----

From: Kwedar.John@epamail.epa.gov [mailto:Kwedar.John@epamail.epa.gov]
Sent: Thursday, May 10, 2001 7:47 AM
To: (b) (4) @ttemi.com
Subject: Region 03 | Case 29238 | Lab CLAYTN | Issue Missing temperature blank

----- Forwarded by John Kwedar/ESC/R3/USEPA/US on 05/10/01 07:46 AM -----

John Kwedar

To: (b) (4) @ttemi.com, towle.michael@epa.gov
cc: R3 ESC-CLIENTS

ORIGINAL
CASE 29238
SDG# C0001

05/09/01 01:45 PM

Subject: Region 03 | Case 29238 | Lab CLAYTN | Issue Missing temperature blank

Please see attached. Results will be compromised and flagged. Do we proceed or resample?

Thanks,

John Kwedar

----- Forwarded by John Kwedar/ESC/R3/USEPA/US on 05/09/01 01:31 PM -----

(b) (4) dyncorp.com>

To: John Kwedar/ESC/R3/USEPA/US@EPA, Betty Jeffery/ESC/R3/USEPA/US@EPA

05/09/01 01:10 PM

Subject: Region 03 | Case 29238 | Lab CLAYTN | Issue Missing temperature blank

Please respond to (b) (4)

I received a voice-mail from CLAYTN to report that there was no temperature blank in the cooler for Case 29238. The lab used the IR gun to obtain a temperature of 17.7 C. The lab also reported that the samples arrived in a very large cooler (about 3 ft. long) and there were only two small bags of ice and a lot of vermiculite. The samples were not directly touching the ice in the cooler. Please advise on how the lab should proceed.

Thanks,
Heather

(b) (4)

DynCorp
(703)264-9348

5/9 12:12 PM

Karen Coonan left a voice-mail to report that there was no temperature blank in the cooler for Case 29238. The lab used the IR gun to obtain a temperature of 17.7 C. The lab also reported that the samples arrived in a very large cooler (about 3 ft. long) and there were only two small bags of ice and a lot of vermiculite. The samples were not directly touching the ice in the cooler.

CC: "Dan Slizys (E-mail)" <slizys.dan@epamail.epa.gov>...

ORIGINAL

CASE 29238
SDG# C0001

From: (b) (4)
To: (b) (4)@dyncorp.com"@Clayton_DOM.GWIA
Date: Thu, May 10, 2001 11:00 AM
Subject: Case 29238

Heather,

Just an update on this case. This is the one that the temperature upon arrival was 17.7. John Quadra(?) from the region called me. I gave him info on the condition of the cooler upon arrival. He said he was going to have to defer it to a higher person. I have not heard back from him yet.

(b) (4)
Clayton Group (b) (4)
CLP Project Manager
(b) (4)
n@claytongrp.com